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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,461	12/06/2001	Cathryn E. Goodman	CM01497I(72458)	3518

22242 7590 10/03/2003

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CHICAGO, IL 60603-3406

EXAMINER

BALI, VIKKRAM

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 10/03/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/006,461

Applicant(s)

GOODMAN ET AL.

Examiner

Vikram Bali

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shigematsu (EP 1018695).

With respect to claim 1, Shigematsu discloses the fingerprint sensor that includes a cell (see figure 1A), a fingerprint contact surface coplanar to the memory (see figure

Art Unit: 2623

1A, numerical 102a, the contact) as claimed. He fails to explicitly disclose the memory cells. But, the figure 1A numerical 103 teaches a memory that is included in the cell. Therefore, one ordinary skilled in the art at the time of invention can simply makes the memory as present in every cell of the Shigematsu as a memory cells as taught, thereby making the fingerprint sensor as a huge memory to store the fingerprint of the person.

With respect to claim 2, Shigematsu further discloses the solid-state memory, (see the figure 1A, the fingerprint sensory is a integrated circuit i.e. solid state memory) as claimed.

With respect to claims 3 and 4, the random access memory and the static random access memory are well known in the art of memory to by use in storing the data. Therefore, it have been obvious to one ordinary skilled in the art at the time of invention to simply use the well known features of random access memory and the static random access memory to store the data.

With respect to claim 5, Shigematsu further discloses the charge storage device, (See figure 1A, numerical 102a) as claimed.

With respect to claims 6-9, Shigematsu further discloses memory includes plurality of conductive surfaces, conductive surfaces are each electrically coupled to a

Art Unit: 2623

corresponding electrical devices, common rail, (see figure 16, each cell is connected to the corresponding cell, thereby, making the components in each cell connected to each other) as claimed.

With respect to claim 10, Shigematsu further discloses the surface comprises an epoxy material, (see col. 7, lines 32-34) as claimed.

4. Claims 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shigematsu (EP 1018695) in view of Newton et al (US 6376393).

With respect to claim 11, Shigematsu discloses the invention substantially as discloses and as described in claim 10. However, he fails to disclose the conductive paths are comprised of conductive spheres, as claimed. Newton teaches an anisotropic dielectric layer device for security with conductive paths are comprised of conductive spheres, (see figure 3 and col. 4, lines 26-29) as claimed. The two references are of analogous art as they are solving similar problem of fingerprint sensor. The contact of the Shigematsu can be replaced by the sensing elements of Newton as taught. This will provide an apparatus that will acquire the fingerprint with maximum surface.

With respect to claims 12 and 13, the substantial resistance to the current flow, and the spheres are comprised of nickel oxide is well known in the art of capacitance measuring. Therefore, it have been obvious to one ordinary skilled in the art at the time of invention to simply use the well known features of capacitance measuring such as

Art Unit: 2623

having a capacitor made of nickel oxide to measuring the finger capacitance in order to get the fingerprint.

With respect to claims 14-16, Shigematsu discloses, the contacts are physically contacts the memory, the contacts physically exposed to an exterior of the fingerprint sensor, (see figure 1A, the contact 102a, is in contact with the memory and the contact is also physically connects to the finger to acquire the fingerprint) as claimed.

With respect to claim 17, the measurement of the contact is design choice as per the size of the sensor, i.e. if one would like to make a bigger fingerprint sensor he/she can use a bigger size of the conductive spheres and if a person would like to make a small fingerprint sensor he/she can use a smaller size of the conductive spheres.

Claims 18-51 are rejected for the same reasons as set forth in the rejection of claims 1-17, because claims 18-51 are different combinations of claims 1-17.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vikkram Bali whose telephone number is 703.305.4510. The examiner can normally be reached on 7:30 AM - 4:00 PM.

Art Unit: 2623

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703.308.6604. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.306.0377.

Vikkram Bali
Examiner
Art Unit 2623



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